

# GREENWorks

## Ideas for a Cleaner Environment

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### **Wetlands – What They Do for You**

*May is Wetlands Month*

The word “swamp” may evoke a dark, wet, threatening place, but swamps are actually forested wetlands – New Hampshire’s most common type of wetland. For centuries, people considered them wastelands and spent tremendous efforts ditching or filling them. Within the latter part of the 20th century, people have come to realize that wetlands are critical to the health of our environment and its inhabitants. In fact, May has been designated “Wetlands Month” in recognition of the benefits they provide.

New Hampshire is about 6 to 10 percent wetlands, which reflect its glacial history. Approximately 97 percent of those wetlands are nontidal and 3 percent are tidal wetlands. Since the 18th century, about 50 percent of the tidal wetlands and about 10 percent of the nontidal wetlands have been destroyed. Compared to other states, however, New Hampshire has done well; it is one of three states that have retained more than 80 percent of its wetlands since 1780.

Wetlands have water at or near the surface and saturated soils for part of the year, and plants that are tolerant of wet conditions. As wetlands disappear, so do the benefits we derive from them, including reduction of flood flows, recreation, maintenance of water quality and quantity, erosion control and wildlife habitat.

#### **Wetlands Support Water Quality and Drinking Water**

Wetlands protect the quality of water in our lakes and streams. They remove excess nitrogen and retain sediments with contaminants – such as metals or the nutrient phosphorus. This prevents the nutrients and contaminants from entering the waterways, thus ensuring the quality of waters downstream. Water quality is important as surface water is the drinking water source for 40 percent of the state’s population. Water quality is important for the animals that live in surface waters. In tidal areas, retention of sediment is especially important to minimize siltation in shellfish beds.

#### **Wetlands Moderate High and Lows Flows**

Wetlands slow runoff from upland areas and release it slowly, which results in a reduction of peak flood flows and, consequently, less flood damage downstream. Wetlands maintain in-stream flows in dry periods. Since groundwater is often discharged into wetlands, and wetlands “feed” streams, streams continue to flow for a longer amount of time where wetlands are present. This is important for water supply and wildlife habitat.

#### **Wetlands Protect Shorelines**

Wetlands located along waterways and shorelines buffer the natural wind and waves as well as the human-generated waves from boating activity. In addition, erosion and sedimentation are reduced when organic matter accumulates and provides a surface on which other plants may grow.

### **Wetlands support recreation ... and the economy**

Among the 50 states, New Hampshire's economy ranks seventh in its reliance on travel and tourism. It is the second largest industry in the state. Travel and tourism brings more than \$4 billion annually into the economy and employs more than 65,000 residents. In 2006, residents and visitors spent \$525 million in New Hampshire for fishing, hunting and wildlife watching, and swimming. Hunting alone generates \$71 million in revenue and provides more than 1,400 jobs. A significant part of the tourism monies are there because of New Hampshire's natural features – clean lakes and wildlife.

### **Wetlands Support Wildlife**

Wetlands provide essential habitat for wildlife. Wetlands support almost two-thirds of New Hampshire's wildlife in greatest need of conservation. Some small seasonal surface waters known as vernal pools – temporarily flooded depressions that lack breeding fish populations – are the breeding habitat for amphibian species that live in upland area most of the year. Larger wildlife, such as moose, depends on wetlands for their food source as well.

### **Fisheries**

Estuarine areas and coastal marshes – where saltwaters and freshwaters mix – are among the most ecologically-productive areas in the world. In tidal areas, retention of sediment is especially important to minimize the deposition of fine sand or silt in shellfish beds. Tidal wetlands serve as spawning and nursery areas for fish, including those that are commercially harvested. About 32 percent of the commercial fish and shellfish harvested in the northeast Atlantic are dependent on estuaries and the wetlands that are an integral part of estuarine ecosystems. Commercial fisheries harvests in New Hampshire were valued at \$19 million in 2007.

### **Get outside and explore wetlands ...**

Visit a bog, marsh, swamp or floodplain forest or vernal pool in your town. Contact your local conservation commission at <http://www.nhacc.org/commissions/>.

Participate in a wetland walk, canoe trip, bird watch, or other outdoor activity. Take a hike with family and friends. Visit [http://www.nhoutdoors.com/hiking\\_trails.htm](http://www.nhoutdoors.com/hiking_trails.htm) or <http://www.nhdfl.org/events-tours-and-programs/visit-nh-biodiversity/> for more ideas.